

## YETDA INDUSTRY LTD.

# 1.9mm\*3.5mm\*4.15mm Ultra Bright Red Led Lamps Q612ICH4C

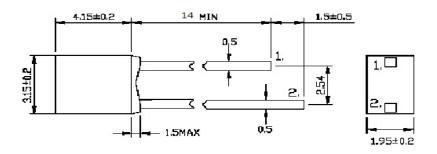
- \* 1.9mm\*3.15mm\*4.15mm with Ultra Bright Red Dice.
- \* Encapsulated with Water Clear Package.
- \* Short Leads.
- \* RoHS Compliance.

## **Absolute Maximum Ratings:**

Parameter	Maximum Rating	Unit		
Peak Forward Current	120	mA		
Continuous Forward Current	30	mA		
Operating Temperature Range	$-20^{\circ}\text{C to} + 75^{\circ}\text{C}$			
Storage Temperature Range	$-40^{\circ}\text{C to} + 100^{\circ}\text{C}$			
Lead Soldering Temperature	260°C for 3 seconds			
	1.6mm (0.063 inch) from body			

## Electro-Optical Characteristics ( $Ta = 25^{\circ}C$ )

Parameter Radiant	Test Condition	Symbol	Min.	Тур.	Max.	Unit
Forward Voltage	IF = 20mA	VF		2.0	2.4	V
Reverse Current	VR =5V	IR	5			uA
Luminous Intensity	IF = 20mA	Iv	200	300		mcd
Spectral Bandwidth	IF = 20mA	$\Delta \lambda$		20		nm
Wavelength	IF = 20mA	λd		625		nm
Viewing Angle	IF = 20mA	2 <b>θ</b> 1/2		60		deg



## YETDA INDUSTRY LTD.

Fig 1. Forward Current vs. Forward Voltage

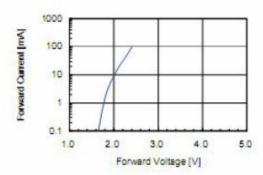


Fig 2. Relative Intensity vs. Forward Current

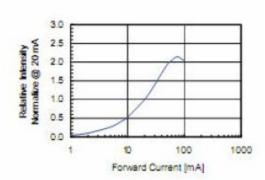


Fig 3. Forward Voltage vs. Temperature

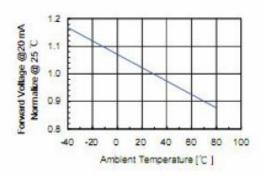


Fig 4. Relative Intensity vs. Temperature

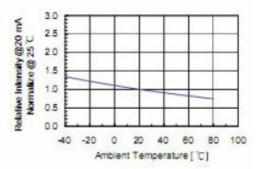
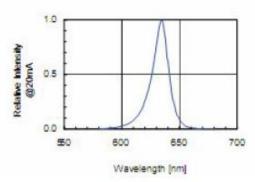


Fig 5. Relative Intensity vs. Wavelength



## YETDA INDUSTRY LTD.

## •Soldering:

#### 1. Manual of soldering

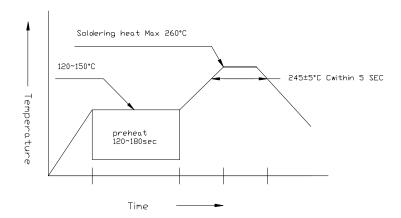
The temperature of the iron tip should not be higher than 260°C and

Soldering within 3 seconds per solder-land is to be observed

2. DIP soldering (Wave Soldering):

Preheating:  $120^{\circ}\text{C} \sim 150^{\circ}\text{C}$  within 5 sec.  $260^{\circ}\text{C}$  (Max)

Gradual Cooling (Avoid quenching)

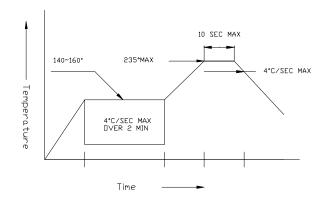


### 3. Reflow Soldering

Preheating:  $140^{\circ}$ C ~ $160^{\circ}$ C ± $5^{\circ}$ C, within 2 minutes.

Operation heating:  $235^{\circ}$ C (Max) within 10 seconds (Max)

Gradual Cooling (Avoid quenching)



#### •Handling:

Care must be taken not to cause to the epoxy resin portion of Yetda LEDS while it is exposed to high temperature.

Care must be taken not rub the epoxy resin portion of Yetda LEDS with hard or sharp article such as the sand blast and the metal hook